

## DOCUMENT RESUME

ED 416 380

CE 075 850

AUTHOR Galusha, Jill M.  
TITLE The Use of Computer Technology by Older Adults.  
PUB DATE 1998-00-00  
NOTE 13p.  
PUB TYPE Information Analyses (070)  
EDRS PRICE MF01/PC01 Plus Postage.  
DESCRIPTORS \*Computer Attitudes; \*Computer Literacy; \*Computer Networks;  
\*Computer Oriented Programs; \*Older Adults; Online  
Searching; Training  
IDENTIFIERS SeniorNet

## ABSTRACT

The older adult (55+) population is becoming a significant presence in the personal computer market. Seniors have the discretionary income, experience, interest, and free time to make use of computers in interesting ways. A literature review found that older adults make use of computers in significant numbers: 30 percent of computer owners are older than 55 years old. Twenty-three percent of seniors over the age of 75 now own Personal Computers (PCs). Genderwise, 38% of male respondents own PCs compared to 23% of female respondents. Thirty-three percent of survey respondents who are married own PCs versus 23% of unmarried respondents. Of PC owners, 53% are college graduates, 22% have "some college," and 7% did not finish high school. Seniors use computers to stay in touch with family and friends via e-mail, research health issues, write, play games, manage personal finances, and create graphics in desktop publishing. The primary reason that 71 percent of seniors do not own computers is unfamiliarity with computers. Training opportunities for seniors are increasing, however, and seniors are taking advantage of them, especially using peer tutoring. Learning to use computer technology is a step toward lifelong learning for senior adults, particularly when they have access to the Internet and know how to use it. The SeniorNet nonprofit network provides computer literacy training for persons over 55 years old. Seniors are increasingly taking advantage of training opportunities and using computers to enrich their lives. (KC)

\*\*\*\*\*  
\* Reproductions supplied by EDRS are the best that can be made \*  
\* from the original document. \*  
\*\*\*\*\*

Running head: TECHNOLOGY AND OLDER ADULTS

## The Use of Computer Technology by Older Adults

Jill M. Galusha

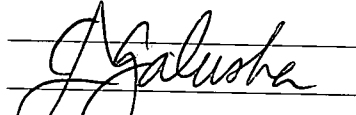
University of Southern Mississippi

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- ☒ This document has been reproduced as received from the person or organization originating it.
- ☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL  
HAS BEEN GRANTED BY

  
TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

### Abstract

The older adult (55+) population is becoming a significant presence in the personal computer market. Seniors have the discretionary income, experience, interest, and free time to make use of computers in interesting ways. This literature review explores the unique characteristics of the senior PC user.

### The Use of Computer Technology by Older Adults

Like any other day, a woman sits down to her computer. She logs on to the internet, makes travel reservations, schedules a meeting, and replies to her email. This scene probably conjures up images of professional woman performing her daily job functions. Actually, these are the activities of a 60 year old retired telephone operator, in this case -- this author's own mother. The travel reservations are to a RV site in Virginia. The meeting is with her retired sister who is planning to meet her (along with her horses) at the RV site. The email is correspondence with this author on the subject of an upcoming family wedding. In addition to these activities, this woman researches the latest treatments for thyroid disease, a disease she has had for several years. As she goes about her business, her husband tries to prod her off the computer so he can continue work on a book he is writing. Like her, he is retired and needs access to the family computer.

Scenes like this are played out every day in the lives of senior Americans. Like the VCR, and the microwave before it, seniors are accepting computer technology in increasing numbers. In addition, American demographics show an increasingly older population. This shifting of demographics will be amplified as the baby boomers join the rank of seniors. In fact, beginning January 1, 1996, a baby boomer turns 50 years old every 7 1/2 seconds (<http://www.valic.com/2622.html>, 1997). The sheer size of the increasingly older population makes them impossible to ignore. In significant numbers they are dispelling the myth that "You can't teach an old dog new tricks."

Seniors are actively learning new technologies in ways that the younger population should envy. They have the experience to seek out new learning and the benefit of time to explore their interests while using technology in meaningful ways. These are not a "rocking chair" group. Instead,

they are enhancing their lives and the lives of others by using computers and the internet. Rather than fearing new technology, they are embracing it, and are presenting a marketing segment not to be ignored. This literature review discusses the phenomenon of the computer literate senior population.

### Background

The advent of the desktop computer revolutionized the way white collar Americans performed their jobs. VisiCalc, a spreadsheet program was considered the "program that sold computers." It made number crunching especially easy at a time that the American workforce needed productivity improvements. Still, the computer was a machine used, almost exclusively, by business professionals, the government, and military. It was an expensive calculator and was difficult to operate. It was not until the late 70's that Apple and Tandy began to introduce desktop computers that were targeted to the home PC market. Later, when online service providers introduced the internet to American households, they fueled the growth of the home PC market. Additionally, PC manufacturers vastly improved the computer-human interface with the invention of the mouse. Graphical user interfaces replaced command driven operating systems, thus making the PC much easier to learn and use. New computers come preloaded with software, eliminating the need for technical expertise during set up. Most computer manufactures have free technical assistance for those who do encounter problems. This meant the average American, with or without keyboarding skills, could use computers, "out of the box" effectively.

Business professionals and students, among others, saw the usefulness in bringing computer technology into their homes. The proliferation of the internet and the availability and improved quality of telecommunications systems facilitated the growth of the home PC industry. In fact, more than half of the PCs purchased in 1995 were for home use (Adler, 1996). The perception of many

computer and software manufactures was that this technology was best suited to the younger generation -- a generation that could "grow up" with the technology. This strategy, however, neglected the fastest growing segment of our population -- older Americans.

Interestingly, the aging population has more leisure time and more discretionary income than the youth first targeted by computer and software manufacturers. The interest in technology by senior adults was also underestimated. Research has found that older adults make use of computers in significant numbers (Adler, 1996).

#### PC Ownership Among Older Adults

During 1995, using a grant from Intel Corporation, SeniorNet performed a survey of computer attitudes, ownership, and usage among senior Americans (age 55+). SeniorNet is a national, non-profit organization whose mission is to provide senior adults with computer literacy skills. Their survey consisted of telephone interviews of 600 randomly selected seniors and 100 self-identified computer-using seniors (Adler, 1996).

The survey found that of all PC owning adults, 30% are between the ages of 55 and 75. This represents a 43% growth in computer ownership in the past 16 months. Although those under the age of 55 still own the majority of PCs, in a few years PC ownership among seniors is expected to be about the same as PC ownership within the general population. This further eliminates the negative perception that senior adults do not readily adopt new technology, as compared to non-seniors (Adler, 1996). Another survey by the American Association of Retired Persons (AARP) supports their findings. The AARP survey found that of their members who perform volunteer work, 24% own computers (Marks, 1996).

The demographics of PC owning seniors are interesting. Gender, marital status, and education appear to be significant factors; however, age is not a factor. Twentythree percent of seniors over the age of 75 now own PCs. Genderwise, 38% of male respondents own PCs compared to 23% of female respondents. Thirtythree percent of survey respondents who are married own PCs versus 23% of unmarried respondents. Not surprisingly, educational level and PC ownership are closely related. Of PC owners, 53% are college graduates, 22% have "some college," and 7% did not finish high school (Adler, 1996).

#### Seniors Use of Home PCs

When asked why he bought a PC, one senior reported, " I couldn't keep up with my 4 year old grandson." (Dickerson, 1995) Seniors buy computers for a number of reasons; however, once purchased, older adults use their PCs in profound ways. As seniors retire, they continue to be active in their communities and are more likely to stay in their homes as their health permits. The computer and the internet have fostered activism, creativity, communication, and improved access to health-related information. Seniors are active in local, state, and federal politics through the use of electronic communication (email) and other correspondence. They use their wealth of experience, creativity, and free time to write memoirs, start post-retirement businesses, or perform research on the web. PCs and the internet have brought the world into their homes. Also, the internet takes seniors out into the world. For example, SeniorNet has a program that links seniors and schoolchildren to discuss everything from the Great Depression to the effects of aging. (Dickerson, 1995).

Seniors also use the internet to connect with each other, to correspond with family members, and to form friendships with others miles away. This is particularly important because friends and

family are often geographically distant. Staying in touch with others despite retirement or illness can be a lifeline for the lonely or depressed. One senior, a 68-year-old victim of Parkinson's disease says, "I feel like I'm with it and connecting with the present and future." (Dickerson, 1995) Feeling connected is important to all of us, as social beings, regardless of age. Although this author is 300 miles from family and friends, the internet has reduced feelings of isolation and has strengthened family bonds because parents, and 3 out of 4 siblings (as well as numerous friends, aunts, uncles and cousins), stay connected via email.

Information is often referred to as "power" and seniors are using information to empower and enrich their lives. Seniors "on the net" research information on health care and access news and reference information (Adler, 1996). A small minority of online seniors participate in "chat" rooms (6%), although electronic correspondence has resulted in more than a few marriages (Dickerson, 1995). In fact, SeniorNet claims 6 cyber romances which led to marriage (Hakala, 1996). Romantic purposes aside, senior report using their computers most often for writing (84%), playing games (60%), managing personal finances (54%), and creating graphics of desktop publishing (34%). They believe writing is the most important use of their computers (Adler, 1996).

#### Reasons behind Non-ownership

Although 29 % of seniors own PCs, 71% do not. The primary reason cited for non-ownership is unfamiliarity with computers. Of those who are familiar with computers but do not own a PC, many are still employed full-time and are more likely to have access to a computer at work, thereby not needing one at home. Many of the non-owners (68%) have adult children who own computers. Interestingly, 49% have grandchildren who own computers and 36% have computer-owning friends. Non-owners who are considering buying a PC are often those whose family and friends are PC owners



(Adler, 1996). Seemingly, PC ownership spreads among a network of friends and family who can help each other with the technology and use it to stay connected. Usually working adult children acquired PCs first, followed by grandchildren, then grandparents. The same sort of proliferation occurred within friends and relatives families.

### Challenges

The greatest challenge for seniors in this information age are not availability of discretionary funds to purchase computers and internet access. The challenge lies in having enough training for all interested seniors. Older Americans did not learn about computers in school. Nor did they learn to use computers at work, even when presented with opportunities. David Hakala (1996) speculates that "... corporate senior managers avoided keyboards, delegating "clerical" tasks such as work processing, spread sheets and answering e-mail." (para. 2) When seniors retired, issues of status became inconsequential and senior executives began exploring the potential of computers in imaginative ways.

Seniors may not be comfortable learning computer usage from a technical twenty-something. However, they have responded well to peer tutoring and training. SeniorNet has established 78 learning centers that offer computer classes specifically designed for older adults. The report their greatest challenge is not overcoming "technophobia" but keeping up with training (Haas, 1995).

### Interpretation

The lack of fear by older adults is in contrast to this author's experience in teaching computer literacy to younger adults. These novice computer users report feeling "intimidated" by computers. They fear "breaking" the computer, or erasing important information. Perhaps this is because they have more to lose as a result of their errors. These students have many responsibilities, in and out of the classroom that would be jeopardized by erased disks and other errors. On the other hand, seniors

embark on computer discovery in a less stressful setting. After all, if they forget an example or erase a disk, they simply reassess and start over. They are freer to experiment and explore. When retired seniors get frustrated, they can choose to turn the computer off and pick back up some other day.

Learning to use computer technology is a step toward lifelong learning for senior adults, particularly when seniors have access to the internet, and know how to use it. Many seniors are maintaining web sites that their peers can use to easily access legal and health information as well as obtain help with Social Security (Thorne, 1996). They are in the enviable position of having the free time to explore the digital community. Senior's wealth of experience provides them with a frame of reference they can use to explore, in depth, topics that interest them. In addition, they enrich the lives of others by sharing their own histories and experiences via the internet. By using technology to take an active role in the digital community, they stay involved and informed. It is becoming the new equivalent of the old time Community Square. The anonymity inherent in the internet provides an excellent avenue for intellectual free expression by seniors (and others). This is one of the few places where typical age-related biases are unlikely to exist.

Before seniors can use their computers and access the internet they must be trained. Two interesting training phenomena have occurred. The first is senior's use of peer tutoring and training techniques. They identify with each other and teach each other in non-condescending ways without the help of "experts." More importantly, the fact that seniors have elected these learning methods as an alternative to traditional training proves their continued involvement and resourcefulness. One senior, Herb Mellinger, a retired General Motors engineer, started a training company dedicated to helping fellow seniors become computer literate. Needless to say, business is booming, and Herb loves the work (Hakala, 1996).

The other phenomena involve seniors in self-directed learning roles. The SeniorNet survey asked participants how they learned to use their PCs. Forty percent of respondents taught themselves. Although computers, software, and the internet have become easier to learn and use over the years, they can still present serious challenges to even the most experienced computer users. This initiative and self-directedness by seniors further disproves the "can't teach an old dog new tricks" adage.

There are still many seniors who are interested in learning computer technology and who need access to training facilities. Their market presence has prompted at least one company to help in this effort. Intel and SeniorNet are creating a partnership to empower seniors by providing them with training and technology. Intel manufactures computers, computer products and software, and, presumably, is interested in expanding its market share in the growing senior market segment. Hopefully, other technology leaders will take note of senior's participation in the PC market and will develop machines and software that are more intuitive and easier to use. This would certainly benefit all computer users, both young and old.

### SeniorNet

The SeniorNet nonprofit network is ten years old and has grown from 22 members to over 18,000. Their mission is to provide keep their peers informed of topics that interest them such as travel, health, social security, etc. They also provide computer literacy training for their age 55+ population and help seniors stay involved through forums and email. Interestingly, a man who got frustrated trying to find a suitable senior living facility for his grandmother started this organization. He could not find a central repository of senior-related information. As a result, SeniorNet was founded in 1988 to provide this, and many more, services to senior adults (Hakala, 1996).

Summary

Older adults are dispelling the myth that "you can't teach an old dog new tricks" by adopting computer technology in surprising numbers. Seniors have more discretionary income and more leisure time to explore computer technology. In fact, statistics show that of all PC owning adults, 30% are over the age of 55 (Adler, 1996). Seniors are using their PCs in interesting ways; their PC use has helped them stay connected, informed, and empowered. Most non-PC-owning seniors are unfamiliar with computers. Consequently, the greatest problem encountered by PC and non-PC-owning seniors is lack of training. Large companies are beginning to take a serious interest in the senior PC market. Seniors in organizations such as SeniorNet are promoting computer use among older adults. Use of computer technology is no longer limited to business use and techno twenty-somethings. With the growth of the 55+ population, we can expect to find more seniors buying and using PCs.

### References

- Adler, R. (1996, July 21). Older adults and computers: Report of a national survey SeniorNet {Online}, Available HTTP: <http://www.seniornet.org/intute/survey2.html>
- Dickerson, J. (1995). Never too old. Time, 145(12), [Online], Available HTTP: <http://www.alliancenet.com/Articles/Never2old.html>
- Haas, B. (1996, July 13). Intel Corporation joins with SeniorNet to bring PC power to older adults. SeniorNet [Online], Available HTTP: <http://www.seniornet.org/instide/nr951128.html>.
- Hakala, D. (1996, July 13). The silicon lab for cyber-seniors. Boardwatch, X(4), [Online] Available HTTP: <http://www.boardwatch.com>
- Marks, K. (1996). Report on ownership of computers and modems among AARP volunteers. AARP Evaluation Research Services department. {Online}, Available Email: [jcohen@a1.aarp.org](mailto:jcohen@a1.aarp.org) {1996, July 26]
- No author. The Variable Annuity Life Insurance Company home page. {Online} Available HTTP: <http://www.valic.com/2622.html> {1997, March 29}.
- Throne, D. (1996). Activites, events and services for and about seniros. Senior World {Online} Available HTTP: <http://www.infi.net/~dthorne/> {1996, July 18}.



**U.S. Department of Education**  
Office of Educational Research and Improvement (OERI)  
Educational Resources Information Center (ERIC)



## REPRODUCTION RELEASE

(Specific Document)

### I. DOCUMENT IDENTIFICATION:

Title: <i>The Use of Computer Technology by Older Adults</i>	
Author(s): <i>Jill M Galusha</i>	
Corporate Source:	Publication Date:

### II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following two options and sign at the bottom of the page.

The sample sticker shown below will be  
affixed to all Level 1 documents



Check here  
**For Level 1 Release:**  
Permitting reproduction in  
microfiche (4" x 6" film) or  
other ERIC archival media  
(e.g., electronic or optical)  
and paper copy.

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL  
HAS BEEN GRANTED BY

*Sample*

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

Level 1

The sample sticker shown below will be  
affixed to all Level 2 documents



Check here  
**For Level 2 Release:**  
Permitting reproduction in  
microfiche (4" x 6" film) or  
other ERIC archival media  
(e.g., electronic or optical),  
but *not* in paper copy.

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS  
MATERIAL IN OTHER THAN PAPER  
COPY HAS BEEN GRANTED BY

*Sample*

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

Level 2

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Sign  
here→  
please

Signature: <i>Jill M Galusha</i>	Printed Name/Position/Title: <i>Jill M Galusha, Graduate Student USM</i>	
Organization/Address: <i>One Lisa Ct Long Beach, MS 39560</i>	Telephone: <i>228 822 2955</i>	FAX: <i>228 822 9719</i>
	E-Mail Address: <i>galusha@technologist.com</i>	Date: <i>3/5/90</i>

### III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price:

### IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

Address:

### V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

Acquisitions Coordinator  
ERIC Clearinghouse on Adult, Career, and Vocational Education  
Center on Education and Training for Employment  
1900 Kenny Road  
Columbus, OH 43210-1090

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to: